

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019647**Date Inspected:** 29-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Liu Fa Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector,Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #8

This QA Inspector observed the following work in progress

Orthotropic Box Girder (OBG)

Shielded Metal Arc Welding (SMAW)

Repair welding of Weld joint # 044 as per WRR no. B-WR 19566, located on Bike path, OBG Component BK 004A1 -060. Welder is identified as 037840. ZPMC Quality Control (QC) Inspector is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -1G (1F) -Repair.

Repair welding of Weld joint # 006 as per WRR no. B-WR 19563, located on Bike path, OBG Component BK 004ASD1 -060. Welder is identified as 069894. ZPMC Quality Control (QC) Inspector is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -2G (2F) -Repair.

Repair welding of Weld joint # 018 located on Bike path, OBG Component BK 004A2 -064. Welder is identified

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as 058009. ZPMC Quality Control (QC) Inspector is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS – 345 –SMAW -1G (1F) -Repair.

Weld joint # 104, located on Bike path, OBG Component BK 004A4 -057. Welder is identified as 037840. ZPMC Quality Control (QC) Inspector is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS – B –P -2114.

### Flux cored Arc welding (FCAW)

Weld joint # 068, located on OBG Component, Bike path BK 004A3 -057. Welder is identified as 054459. ZPMC Quality Control (QC) Inspector is identified as Zhang Ya Xu. The welding variables recorded by QC appeared to comply with the WPS – B-T-2132-Esab.

### Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07970

This QA inspector performed (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an TL 6028 MT report for this date. The member is identified as OBG Bike path components. The weld designations reviewed are as follows:

BK004ASD1 -063 –Jt. nos- 005,006,018,021  
BK004A1 -063 –Jt. nos.-043, 044

### Ultrasonic Testing (UT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07975

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report (TL 6027) for this date. The member is identified as OBG Bike path components. The weld designation reviewed as follows:

BK004A5 -064 – Jt. nos. -112, 122  
BK004A5 -064 –Jt. no. 008  
BK004A3 -064 –Jt. no. 002

### Visual Inspection Testing (VT):

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The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07979

This QA inspector performed Visual Inspection (VT) of 100% of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Bike path closure plates at both ends. The weld designations reviewed are as follows:

BK004A -057

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

No relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

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**Inspected By:** Baskar, Govindarajan

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer